3.9 VISUAL RESOURCES

This section presents the existing visual resources and conditions near the proposed Plymouth Generating Facility (PGF) site and assesses the visual impacts that would result from the construction and operation of the PGF, including impacts on views and impacts from light and glare.

3.9.1 AFFECTED ENVIRONMENT

3.9.1.1 Site Area

The site area is located on the Columbia River Plateau, which is characterized by relatively flat to moderately rolling terrain. The terrain is primarily a mixture of grassland and agricultural land interspersed with occasional buttes and small rock outcrops. The Columbia River is the main drainage in the region and is fed by several small drainages, such as Fourmile Canyon. Mature trees and riparian vegetation are concentrated along the drainages and wetlands. Views within the plateau are relatively open and expansive, interrupted by slight changes in terrain, vegetation, and existing development.

The Columbia River defines the southern boundary of the site area and is used for boating, fishing, windsurfing, and commercial shipping. Views from the river corridor are relatively open. The McNary Dam, City of Umatilla, and the community of Plymouth are all located in the eastern portion of the site area. Transmission lines run through the site area and are concentrated near the McNary Dam and Substation. The Burlington Northern Santa Fe (BNSF) railroad tracks (freight only) and Christy Road are located south of the plant site and run east-west. To the west of the rural community of Plymouth, the Williams Northwest Gas Pipeline Company (Williams Co.) compressor station and the AgriNorthwest grain facility are dominant industrial structures in the landscape.

3.9.1.2 Proposed Action

3.9.1.2.1 Plant Site

The plant site is located within the boundaries of Plymouth Farm, which is located 2 miles west of the community of Plymouth in Benton County, Washington. Plymouth Farm is an orchard operation that consists of cherry and apple trees, an irrigation pond, and vacant land formerly used for orchard crops. The Williams Co. compressor station is located on approximately 69 acres adjacent to the plant site. Due to the flat terrain and the uniform vegetation, the Williams Co. compressor station and the AgriNorthwest grain facility to the east of the plant site stand out as dominant structures in the landscape. Nine residences are located within 2 miles of the plant site, but because of their small scale and dispersed siting, they blend into the landscape.

Sensitive Viewpoints

The following groups were identified as having potential views of the plant site:

- Residences adjacent to the plant site

- Travelers on Christy Road, State Route (SR) 14, Interstate 82 (I-82), and the Columbia River
- Communities of Plymouth and Umatilla
- Local hunters, campers, and boaters

Residents of the communities of Plymouth and Umatilla and travelers on I-82 are over 2 miles from the plant site; therefore, they would see the PGF and any structure built on the plant site in the background view. From a distance of 2 miles or more, the proposed plant would not stand out in the landscape. As a result, these two communities and I-82 travelers are not included in the sensitive viewer groups that are analyzed in this section. Some views of the plant site from Fourmile Canyon and along certain points on SR 14 are obstructed by topography. Additionally, hunters and boaters have temporary views of the plant site and views are often obstructed by topography and riparian vegetation along the Columbia River.

The potential visual impacts of the PGF were analyzed from seven representative viewing locations. They represent two sensitive viewer groups who have unobstructed views of the plant site: travelers along certain points on Christy Road, SR 14, and the Columbia River, and residents adjacent to the plant site. The seven viewpoints selected are shown on Figure 3.9-1 and are described in the following paragraphs. The basis of the visual impact analysis is the preparation of visual simulations showing the view from each of these locations with the proposed project added to the existing view of each viewpoint. The analysis thus provides a "before" and "after" view for comparison and analysis of impacts. These "before" views for the seven selected viewpoints are included as the "Existing View" on Figures 3.9-2 through 3.9-9.

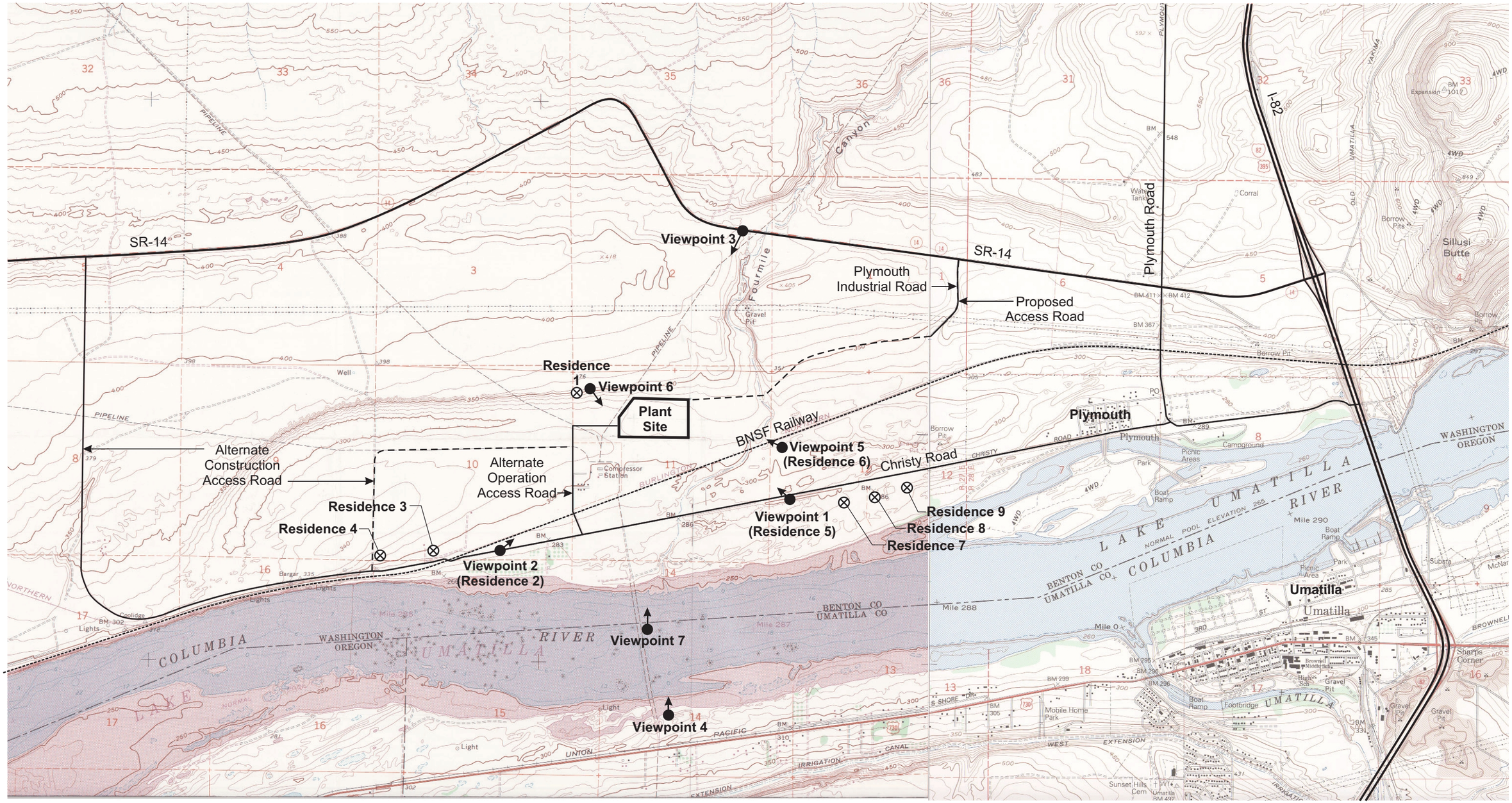
Viewpoint 1

Viewpoint 1 represents the view from Christy Road approaching the plant site from the east (see Figure 3.9-2). During a URS field visit conducted in February 2002, the portion of Christy Road that borders the plant site had mainly agricultural traffic. Young orchards and the Williams Co. compressor station are visible in the foreground from this viewpoint[1].

Viewpoint 2

Viewpoint 2 represents the view from Christy Road as travelers approach the proposed plant site from the west (see Figures 3.9-3 and 3.9-4). From this viewpoint, the existing power lines, farm buildings, and a windbreak are visible in the foreground. The landscape is flat with the Silusi Butte's rolling hills in the distance.

[1] Views within 0.25 mile of the plant site are considered foreground views. Middleground views are seen from 0.25 mile to 2 miles of the plant site. Background views are seen from over 2 miles away.



0 0.5 1

Approximate Scale in Miles

Note: Residences shown are those within 2 miles of PGF plant site, south of SR 14 and north of the Columbia River.

Figure 3.9-1

Analysis Viewpoints and Residence Locations

URS

Plymouth Generating Facility
Plymouth, Washington

Figure 3.9-1 (Continued)

Existing View

Simulated View

Figure 3.9-2
Existing and Simulated Views from Viewpoint 1
Heading West on Christy Road

Figure 3.9-2 (Continued)

Figure 3.9-3
Existing View from Viewpoint 2
Heading East on Christy Road

Figure 3.9-3 (Continued)

Daytime Simulated View

Nighttime Simulated View

Figure 3.9-4
Simulated Daytime and Nighttime Views from Viewpoint 2 Heading East on Christy Road

Figure 3.9-4 (Continued)

Viewpoint 3

Viewpoint 3 represents the view from SR 14 of the area to the north of the plant site (see Figure 3.9-5). The landscape in this area is relatively flat all the way to the horizon. The existing Williams Co. compressor station, transmission line towers, and Columbia River are visible in the middleground from this viewpoint.

Viewpoint 4

Viewpoint 4 represents the view from Umatilla County just across the Columbia River from the plant site (see Figure 3.9-6). The Columbia River, Williams Co. compressor station, and the AgriNorthwest grain facility are visible in the middleground from this viewpoint.

Viewpoint 5

Viewpoint 5 represents the view from Residence 6, which is adjacent to the plant site to the east (see Figure 3.9-7). The Williams Co. compressor station, a transmission line tower, and power lines are visible in the foreground of the landscape from this viewpoint.

Viewpoint 6

Viewpoint 6 represents the view from a residence adjacent to the plant site to the north (see Figure 3.9-8). The existing Williams Co. compressor station, the AgriNorthwest grain facility, and a windbreak are visible in the middleground of the landscape from this viewpoint.

Viewpoint 7

Viewpoint 7 represents the view from the Columbia River (see Figure 3.9-9). The Columbia River and shoreline and the Williams Co. compressor station are visible in the middleground of the landscape from this viewpoint.

3.9.1.2.2 Transmission Interconnection

Less than half the length of the transmission interconnection corridor is located within the boundary of Plymouth Farm, while the remaining northern portion of the corridor is located on a neighboring AgriNorthwest farm property. This neighboring property is used for irrigated agriculture, similar to Plymouth Farm's use. The land beneath the proposed transmission interconnection is flat with uniform vegetation. Fields are visible in the background from most viewpoints and in the foreground from Viewpoint 6 (from a nearby residence to the north).

3.9.1.2.3 Access Road

The proposed access road that would be used during PGF construction and operation would use a portion of the AgriNorthwest grain facility's existing access road from SR 14 (Plymouth Industrial Road). Where the proposed access road would branch off from the existing access road, the proposed road would pass through land currently used for dryland and irrigated agricultural purposes, a small portion of which is located within Plymouth Farm. The new

portion of the roadway would be approximately 5,300 feet in length. The access road area is visible from some points on SR 14 and in the foreground and middleground from Viewpoints 5 and 6 (nearby residences in the north and east).

3.9.1.3 Alternate 230-kV Transmission Interconnection

The existing conditions for the alternate 230-kilovolt (kV) transmission interconnection would be the same as the existing conditions for the proposed transmission interconnection, because the 230-kV line is in the same physical location as the proposed 500-kV line.

3.9.1.4 Alternate Benton PUD/BPA Transmission Interconnection

The portion of the alternate Benton PUD/BPA transmission interconnection corridor that would extend from the plant site to the existing Benton Public Utility District (PUD) 115-kV line along Christy Road would be located within Plymouth Farm, and would also cross the BNSF railroad tracks. For the majority of its length, the alternate Benton PUD/BPA transmission interconnection would involve rebuilding an existing Benton PUD 115-kV line that traverses predominantly rangeland, undeveloped land, and the Columbia River, to connect with the BPA McNary Substation in Umatilla County. The line would be visible from Viewpoints 5, 6 (nearby residences in the north and east), and 1 (Christy Road).

3.9.1.5 Access Alternative

The alternate construction access road would include the use of Christy Road and would necessitate improvement of a dirt road that extends from Christy Road along the western boundary of Plymouth Farm. From the western boundary of Plymouth Farm, the road would turn east and continue on another dirt road on Plymouth Farm property. This segment of the road would lead to the plant site. The existing dirt roads pass between areas of irrigated orchards.

The alternate operation access road would share the existing Williams Co. compressor station access road for the majority of its length. A small portion of existing dirt road that extends onto the site would be paved as part of this alternative. The alternate construction and operation access roads would be located on land that is flat with uniform vegetation. These roads would be visible from Viewpoints 1 and 2 on Christy Road in the foreground and middleground.

3.9.2 ENVIRONMENTAL CONSEQUENCES

3.9.2.1 Methodology

The methodology for identifying visual impacts and determining their significance is based on the U.S. Department of Agriculture (USDA) Forest Service visual analysis method (USDA Forest Service 1979). The Forest Service visual analysis method includes reviewing land use and topographic data, and conducting field reconnaissance to identify sensitive viewer groups and corresponding representative viewpoints. Impacts to views from the representative locations are then analyzed using visual simulations of the proposed project.